AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A herpes simplex virus vector (HSV vector) comprising:

(i) a region containing a full-length promoter of the human calponin gene ~~comprising the nucleotide sequence of Seq. ID No.: 1~~;

(ii) the ICP4 gene encoding a transcription factor essential for initiation of a herpes viral replication which is integrated downstream of the region containing a promoter of the human calponin gene,

(iii) the EGFP gene linked to the downstream of the ICP4 gene via an internal ribosomal entry site; ~~a DNA that encodes a desired protein linked downstream of the ICP4 gene, and expresses the desired protein under the control~~

(iv) the LacZ gene which is integrated upstream of said region containing [[a]] the promoter of the human calponin gene; and

[[(iv)]] (v) a thymidine kinase gene,

wherein the HSV vector is not expressed or replicated in adult normal ~~differentiated~~ cells, ~~said HSV vector~~ is capable of suppressing its replication at a desired period by using the thymidine kinase gene, and is obtained by the steps comprising: (i) inserting a DNA fragment comprising the ICP4 gene, the LacZ gene, the EGFP gene, and the region containing a promoter of the human calponin gene into the ribonucleotide reductase gene locus by a ~~homologous~~ recombination; and (ii) ~~cotransfecting said fragment within the ribonucleotide reductase gene~~

~~locus with a viral DNA in a cell that activates the region containing a promoter of the human calponin gene or a cell that expresses the human calponin gene; and (iii) purifying said vector to a single clone without using an agarose overlay assay by~~ using the expression of ~~a gene~~ the LacZ gene and the EGFP gene integrated in the vector as an index.

2-5. (Cancelled)

6. (Previously presented) The HSV vector according to claim 1, wherein an enhancer is integrated upstream of the region containing a promoter of the human calponin gene.

7. (Previously presented) The HSV vector according to claim 6, wherein the enhancer is a 4F2 enhancer.

8.-19. (Cancelled)

20. (Currently amended) A method for expression/replication of a gene, protein or a peptide of a vector that is not expressed/replicated in adult normal ~~differentiated~~ cells, comprising, introducing the HSV vector according to claim 1 into the cells and tissues of an organism, then expressing and replicating the gene, protein, or peptide of the vector.

21. (Previously presented) A method for suppressing the expression/replication of a gene, protein or a peptide of the HSV vector according to claim 1 comprising,

(i) introducing the HSV vector according to claim 1 into the cells and tissues of an organism,

(ii) expressing and replicating the gene, protein or peptide of the vector, and

(iii) suppressing the expression/replication of the vector at a later desired period by administering an antiviral drug, wherein said antiviral drug is aciclovir or ganciclovir.

22. (Cancelled)

23. (Previously presented) A method for detecting the *in vivo* distribution of the HSV vector according to claim 1, wherein the HSV vector is introduced into the cells and tissues of an organism, then expressed and replicated, and thymidine kinase activity by said vector is determined.

24. (Previously presented) The method according to claim 23, wherein the determination of the thymidine kinase activity is a determination by positron emission tomography using an uracil derivative FIAU labeled with ^{124}I.

25. (Original) The method according to any one of claims 20 to 24, wherein the cells and tissues in the organism are tumor tissues, vascular or lymphatic vessel constriction tissues, nephritic tissues or fibrotic tissues.

26. (Previously presented) A therapeutic drug comprising the HSV vector according to claim 1 wherein proliferating smooth muscle cells are targeted.

27.-34. (Cancelled)

35. (Currently amended) A method for producing a cell-specific HSV vector comprising the steps of:

(a) preparing a DNA fragment comprising,

(i) a region containing a full length promoter of the human calponin gene,

(ii) the ICP4 gene encoding a transcription factor essential for initiation of a herpes viral replication which is integrated downstream of the region containing said full length promoter of the human calponin gene,

(iii) ~~a DNA that encodes a desired protein linked downstream of the ICP4 gene, and expresses the desired protein under the control of said~~ and the EGFP

gene linked to the downstream of the ICP4 gene via an internal ribosomal entry site,

(iv) the LacZ gene integrated upstream the region containing [[a]] the full length promoter of the human calponin gene, and

[[(iv)]] (v) a thymidine kinase gene;

(b) inserting said DNA fragment into the ribonucleotide reductase gene locus by homologous recombination;

(c) cotransfecting said fragment within the ribonucleotide reductase locus with a viral DNA in a cell that activates the region containing [[a]] the full length promoter of the human calponin gene or a cell that expresses the human calponin gene; and

(d) purifying to a single clone by limiting dilution without using agarose overlay assay using the expression of [[a]] the LacZ gene and the EGFP gene integrated in the HSV vector as an index, wherein said HSV vector is not expressed or replicated in adult normal ~~differentiated~~ cells and that is capable of suppressing its replication at a desired period by using the thymidine kinase gene.

36. (Previously presented) The method for producing the HSV vector according to claim 35, wherein the cell is an ICP4 (-) cell.